
book review

***Wildlife in Transition: Man and Nature on Yellowstone's Northern Range* by Don Despain, Douglas Houston, Mary Meagher, and Paul Schullery. 1987. Roberts Rinehart, Boulder, CO. Paperback, 143 pp. (ISBN 1-911797173) \$6.95.**

During the last 20 years, management of Yellowstone's northern range has been an extremely controversial issue. The recent publication of Alston Chase's *Playing God In Yellowstone* has further fueled the fires of controversy.

The authors of *Wildlife In Transition* have attempted to present the National Park Service's perspective and incorporate the scientific and philosophical basis for management policies. The intended readership is a well informed park visitor or lay person.

My overall impression of the book is very positive. It is readable, informative, and generally well done. The introductory chapter, "A Wilderness In Transition," includes an excellent discussion of problems faced by park managers and scientists in studying and managing national park ecosystems. I will probably use this material in an upper division class which I teach.

Most importantly, the relationship between research and management is discussed. Despain et al. emphasized that National Park Service research had not been aimed at supporting existing policies and that researchers must never let employers' demands interfere with objective research. Although critics will disagree, the authors contend that management of the northern range has evolved from a growing scientific understanding of plant-herbivore relationships, which include a distinction between "economic" and "ecological" carrying capacities. Furthermore, a "great experiment" is underway, which will result in an improved

understanding of the ecosystem.

Most of the text is contained in two chapters dealing with mammals and vegetation. These chapters include historical perspectives and a number of excellent photographs. An important theme of these chapters is that grazing animals and vegetation have co-existed for a very long time on the northern range, and that any attempt to draw conclusions based on short-term studies or subjective impressions is likely to fail. For example, "overgrazing" by elk has been blamed for increased erosion and siltation into the Yellowstone River, when fluctuations in rainfall are likely to have been the actual cause.

However, cause and effect relationships are difficult to establish because so little research has been peer reviewed and published in scientific journals. Most citations in the bibliography have been published as popular articles or in "fugitive literature" as symposium proceedings or research notes. Clearly there is need for more high quality research.

Although there is a great deal of information in this book, which should help the reader better understand this complex ecosystem, I believe the most important contribution is the delineation of the experimental management approach as implemented on the northern range. The authors admit that management policies may have to be changed as we learn more about the system, but that such changes must be based on sound research findings.

In summary, I liked the book. I especially recommend that it be read in conjunction with any of Alston Chase's work on Yellowstone. Furthermore, the price is right, \$6.95 is a bargain for such a valuable book.

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